Wisconsin Department of Transportation – SW Region

PRE-PS&E PROJECT REVIEW CHECKLIST

Note: The pre-PS&E project review should include a review of the plan, special provisions, PS&E documents, a review of the major items in the estimate, and a review of the project schedule, as well as a check on the status in pseTrak. See SWIG 7-35-10 for further guidance.

Design Teams (PM's and/or Supervisor) should strive to review all of these items and get the comments incorporated prior to the eplan review being emailed to the distribution list. The reviewers labeled next to each item or section are the responsible parties. Additional review by staff from other sections is always encouraged.

Reviewer Key
PC QA = Program Controls Quality Assurance Engineer
REC = Region Environmental Coordinator
SWEC = Storm Water/Erosion Control Engineer

I. PLAN REVIEW

A. Title Sheet (FDM 15-1-10)

_____ 1. Location map with structures, stationing, and coordinates - **CADDs Coord, PC QA**
_____ 2. Design Designation – **Pvmt Eng, PC QA**
_____ 3. Correct signature block for project type and fields populated - **PC QA**
_____ 4. Project title and I.D. information match FIIPS - **Programming Eng**
_____ 5. Project length - **Programming Eng**
_____ 6. Horizontal datum note – **Survey Coord, PC QA**
_____ 7. Vertical datum note – **Survey Coord, PC QA**
_____ 8. Project ID info in left margin and in table in upper right-hand corner - **Programming Eng**

B. Written Material (FDM 15-1-15)

_____ 1. General Notes – **PC QA, Utility Coord, SWEC, REC, Pvmt Eng**
_____ 2. Standard Abbreviations – **PC QA**
3. Contacts:
_____ Utilities and Diggers Logo - **Utility Coord**
_____ WDNR liaison - **REC**
_____ Design - **PC QA**

C. Project Overview (FDM 15-1-20.1) - PC QA

_____ 1. Begin/End Project
_____ 2. Road names, alignment identifiers
_____ 3. Station equations
_____ 4. Structure locations
_____ 5. Environmentally sensitive areas
_____ 6. North arrow

D. Typical Sections (FDM 15-1-15)

_____ 1. Existing sections (verify with as-builts) - **PC QA, Pvmt Eng**
_____ Boring log information (often found on separate detail sheet) – **Soils Engineer**
_____ 2. Finished sections (mainline) – **PC QA, Pvmt Eng**
_____ Show limits of topsoil, fertilizer, seed, etc. - **SWEC**
_____ Show "point referred to on profile" and "point referred to on cross sections" - **PC QA**
_____ 3. Finished sections (mainline - superelevated) - **PC QA, Pvmt Eng**
_____ Show limits of topsoil, fertilizer, seed, etc. - **SWEC**
_____ Show "point referred to on profile" and "point referred to on cross sections" - **PC QA**
_____ 4. Superelevation table (often found on separate detail sheet) **PC QA**

_____ 5. Finished sections (ramps) - **PC QA, Pvmt Eng**
  _____ Show limits of topsoil, fertilizer, seed, etc. - **SWEC**
  _____ Show "point referred to on profile" and "point referred to on cross sections" - **PC QA**
_____ 6. Finished sections (side roads) - **PC QA, Pvmt Eng**
  _____ Show limits of topsoil, fertilizer, seed, etc. - **SWEC**
  _____ Show "point referred to on profile" and "point referred to on cross sections" - **PC QA**
_____ 7. Clear zone - **PC QA**
_____ 8. Title and station limits - **PC QA**
_____ 9. Use of DOT bid items - **PC QA**
_____ 10. Conformance with Design Study Report- **PC QA**
_____ 11. Conformance with approved Pavement Design Report – **Pvmt Eng**

E. Construction Details (FDM 15-1-20)

Note: Review for other items listed or not listed here should be performed by the section the work pertains to. PC QA will do an "umbrella" review of entire section.

_____ 1. Unique/special construction details
_____ 2. Match line diagram
_____ 3. Storm sewer plan/profiles – **SWEC**
_____ 4. Traffic control/staging plan – **Traffic Eng**
_____ 5. Intersection details
_____ 6. Interchange details
_____ 7. Erosion control plan – **SWEC**
_____ 8. Permanent signing plans – **Traffic Eng**
_____ 9. Pavement marking plans – **Traffic Eng**
_____ 10. Grading/contour plans (as needed)
_____ 11. Detail sheet showing environmentally sensitive areas and wetland impacts with crosshatching – **REC**
_____ 12. Paving details
_____ 13. ITS plan – **Traffic Eng**
_____ 14. Fencing plans
_____ 15. Lighting plans – **Traffic Eng**
_____ 16. Traffic Signal plans – **Signal Eng, or Local Engineer**
_____ 17. Detour plans (as needed) – **Traffic Eng**
_____ 18. Curb Ramp details (urban) – **Ped/Bike Coord**
_____ 19. Temporary Pedestrian Access route plans & details (Urban) – **Ped/Bike Coord**
_____ 20. Pedestrian Detour route plans & details (Urban) – **Ped/Bike Coord**
_____ 21. Alignment diagram
_____ 22. Alignment ties showing 3 ties to each control point – **Survey Coord**
_____ 23. Avoid duplication with standard detail drawings or plan and profile sheets
_____ 24. Include title for each detail and stationing as needed
_____ 25. Overall constructability – **PC QA, on selected projects**

F. Miscellaneous Quantity Sheets (FDM 15-1-30)

Note: Sections should review items that pertain to their areas of work. PC QA will do an "umbrella" review of all items.

_____ 1. Notations for multiple project ID's
_____ 2. Notations & subtotals for categories
_____ 3. Notations for "more listed elsewhere"
_____ 4. Sheet subtotals for tables extending across multiple sheets
_____ 5. Underline every 5 lines

_____ 6. Earthwork summary table
_____ 7. Include water item for projects with base course for compaction and dust abatement
_____ 8. Include undistributed quantity for base course and erosion control items
_____ 9. Lump sum items such as Finishing Roadway, Maintenance and Repair of Haul Roads, and Mobilization are not required to be shown
_____ 10. Lump sum or each items such as Grading and Shaping Intersections or Grading Shaping Finishing for Barrier Terminals shall be shown with the estimated quantities of materials incorporated into them and note stating that they are for information only.

G. Transportation Project Plat (FDM 12-10-1)

_____ 1. Include only sheets with parcels that are required for contract

H. Plan/Profile Sheets (FDM 15-1-35) **– CADDs Coord** for format
Note: Sections should ensure their areas addressed in these sheets and are consistent with other sheets in the plan. PC QA will do an "umbrella" review of entire section.

_____ 1. Draw plan using horizontal scale of 1 inch equals 100, 50, or 20 feet (use 20 feet in urban areas)
_____ 2. Profiles shall be drawn to same horizontal scale as plan, but vertical scale 10x the horizontal
_____ 3. Begin/End project
_____ 4. Begin/End construction (mainline & side roads)
_____ 5. Stationing including reference line designation for mainline and side roads
_____ 6. Station equations
_____ 7. Horizontal curve data w/superelevation info. (unless provided on alignment diagram)
_____ 8. Profile (include k-value length of curve, grade)
_____ 9. Intersection angles (only if no separate intersection pavement details)
_____ 10. All existing topo screened and proper symbols used
11. All existing utilities (continuity of facilities) with labeling: **– Utility Coord**
    _____ Gas; main, laterals, valves – CAUTION SYMBOLS
    _____ Water; main, laterals, hydrants, valves, stops, MH's
    _____ Telephone; main, MH's, pedestals, poles
    _____ Electric; main, MH's, pedestals, poles, transformers
    _____ Cable TV; main, pedestals
    _____ Fiber optic
    _____ Storm sewer; main, sump laterals, MH's, inlets, pipe sizes
    _____ Sanitary sewer; mains, MH's, laterals
    _____ Force main; main, MH's
    _____ Oil pipeline; main, pipe size - CAUTION SYMBOLS
    _____ Railroad; signals, controller
    _____ Traffic signal; bases, cable, pull boxes, controller
_____ 12. Edges of new pavement and outside edge of shoulder
13. Dimensions (including side roads)
    _____ Median width transitions
    _____ Radii dimensions to flange (only if no intersection details & non-standard design)
_____ 14. Existing & proposed R/W, property line labels, TLE's and PLE's, and construction permits
_____ 16. Slope intercepts
_____ 17. Driveway notes with culvert pipes
_____ 18. Culverts in plan and profile denoting station, size, and skew (show existing pipes in profile view only if to remain)
_____ 19. Road names
_____ 20. Wetlands and other environmentally sensitive areas

_____ 21. Property owners – last name or business name only; include house number if urban project; hatch any buildings to be relocated and add note for removal
_____ 22. North arrow
_____ 23. Marsh/EBS or rock in profile
_____ 24. Structure number in plan view, structure graphic in profile view
_____ 25. Retaining wall number in plan view
_____ 26. Drainage flow arrows (culverts, ditches, crests)
_____ 27. Special ditch profiles
_____ 28. Sidewalks and Curb Ramps with grades – **Ped/Bike Coord**
_____ 29. Benchmark table (unless provided on alignment diagram)
_____ 30. Overall drainage concepts – **SWEC**

I. Structure Plans – Bridge Eng

_____ 1. Stationing at end of bridge deck matches end of roadway pavement stationing
_____ 2. Deck and roadway drainage adequately addressed at bridge wings and roadway approach shoulders
_____ 3. Structure numbers have been assigned to retaining walls, high mast lights, signal structures, and sign structures
_____ 4. Bid items and quantities included in plan and construction estimate
_____ 5. Coordination of bid items (i.e. roadway base materials vs. structure backfills, etc.) between structure plans and roadway plans at juncture points

J. Cross Section Sheets (FDM 15-1-45) – **PC QA**

_____ 1. Original ground, subgrade, and finished surfaces shown
_____ 2. Marsh, rock or EBS surface (denote using hatching)
_____ 3. TLE's, PLE's, and ultimate R/W
_____ 4. Utilities (denote using tic marks) – **Utility Coord**
_____ 5. Offset/elevation/slope annotation
_____ 6. Section intervals of 100 ft in rural areas and 50 ft in urban areas
_____ 7. Odd x-sections at driveways, abrupt terrain changes, cross-drains, beam guard (beginning of EAT approach taper and posts 1, 5, and 9)
_____ 8. Retaining walls
_____ 9. Sidewalk, curb & gutter
_____ 10. Match lines
_____ 11. Earthwork data sheets (often shown in the Earthwork Summary Sheet(s))

II. SPECIAL PROVISIONS REVIEW

Note: PS&E Coordinator will check that most current STSP template is being used and verify referencing correct Spec Book year in first article.

A. Prosecution and Progress Section – PS&E Coord, PC QA
1. Is project intent clear and does it make sense?

B. Traffic Section – Traffic Eng
1. Verify constructability and any staging included is feasible
2. Review any related sections for conformance with the TMP

C. Utility Section – Utility Coord
1. Review for correct contact information
2. Verify agreement with Utility company work plans and anticipated timelines for adjustments
3. Verify agreement with Utility facilities identified within the project limits

D. Environmental SPV's – REC
1. Review to ensure that information about all environmental commitments is included

E. QMP Provisions and other Materials-related Sections – Soils Eng/Pvmt Eng
1. Verify that the correct QMP sections are included
2. Verify that any needed modifications to the standard specifications are included
3. Review any other Materials related sections

F. STSP's – PC QA
1. Verify that they are included in the estimate
2. Verify that all STSP's listed in the estimate are included in the Special Provisions

G. SPV's - PC QA
1. Are they necessary or could they be replaced by a standard bid item?
2. Do they convey the point?

III. PS&E DOCUMENTS REVIEW

A. Standard detail drawing list (SDD) – PC QA
1. Verify most current version is used
2. Verify appropriate drawings are listed
3. Verify list is filtered showing only desired drawings

B. Plan Letter
1. Verify most current version is used - **PS&E Coord**
2. Verify content - **PS&E Coord, staff from appropriate sections**
3. Verify number of plans/proposals requested in "Plans and Proposals" section. The following is suggested, however the PM makes the final determination. - **PS&E Coord**
    a. For La Crosse projects:
        i. **10** copies for local program and small projects
        ii. **15** copies for medium/average size projects
        iii. **20** copies for large, complex projects
    b. For Madison projects
        i. **15** copies for all projects
4. Verify correct schedule dates shown - **Programming Eng**

C. Environmental Commitments
1. Verify Signed Environmental Document cover sheet is included – **REC**
2. Verify Commitments included and correct – **REC, SWEC**
3. Verify Commitments match what is shown in Special Provisions – **REC, SWEC**

D. Contract Time for Completion (DT1923)
1. Verify that project durations calculated in timechart match what is shown on proposal cover sheet (DT1502) and what is specified in the Special Provisions – **PS&E Coord**
2. Verify staging – **PC QA**
3. Verify production rates – **PC QA**

E. Governor Approval Form (DT25)
1. Verify content - **PS&E Coord**

F. Proposal Cover (DT1502)
1. Verify content - **PS&E Coord**

G. Right of Way Cert (DT1899)

1. Verify content - **PS&E Coord**

H. Utility Status Report (DT1080)
1. Verify content - **PS&E Coord**

I. Railroad Cert (DT1804)
1. Verify content - **PS&E Coord**

J. AWP Estimate
1. Verify content - **PS&E Coord, Programming Eng, FIIPS Coord**

K. Estimate Documentation
1. Verify content - **PC QA**
2. Verify estimate review document is attached - **PC QA**

L. Project Agreements
1. SMFA - **Programming Eng**
2. SMMA - **Maintenance Eng**

IV. ESTIMATE REVIEW

A. Major Items - PC QA
1. Review bid items making up 80% of the overall construction estimate.
2. Check the unit prices with Estimator, Bid Express, and comparable projects.
3. Provide design team with suggested unit prices and recommend they take a second look at the 20% items if estimates differ by >5%.

V. SCHEDULE REVIEW

A. PMP Schedule Module and DMR Review - PC QA
1. Verify the PS&E date is correct in the Control Schedule.
2. In the Detail Schedule, check "Percent Project Work Complete" to see if it corresponds with the current status of the project.
3. Verify that the PMP Phase is in sequence with the Life Cycle in FIIPS (shown in the DMR).
4. Make sure actual dates are up to date and percent work complete column is being updated.
5. Verify that notes are being added in PMP Communications Module addressing tasks that are past due or coming near due.

VI. PSE TRAK REVIEW

A. Verify that the region level project status has been cleared for the following items: - PC QA
a. 401 (DNR Water Quality Certification)
b. COE (Army Corps of Engineers 404 Permit)
c. TMP
d. RE
e. RR Eng.
f. UTL

B. If item has not been cleared, verify there an exception is present with notes explaining the reason for the exception listed. - PC QA